

THE EFFECTIVENESS OF EDUCATIONAL VIDEO IN TEACHING VOCABULARY

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Abstract: The main purpose of conducting this research was to investigate whether or not the effectiveness of educational video in teaching vocabulary to the eighth grade students of SMPN 4 Tanjung Raya 1 in academic year 2011/2012. For this purpose, the writer conducted a pre-experimental research by using educational video. The samples were the eighth grade students of SMPN 4 Tanjung Raya I, which consisted of 20 students. The tools used for collecting data were pre-test and post-test. The writer gave two treatments in different time. The data showed that the score of post-test was higher than the score of pretest. The students' pre-test mean score was 39.5. So, the result of pre-test was classified as "Poor". On the other hand, after giving the treatment, the students' post-test mean score was 72.25. It was classified as "Good to Excellent". Moreover, the students' interval score of pre-test and post-test was 32.75. Therefore, it showed that there was a difference between score of pretest and post-test after treatment. In conclusion, this research proved that the use of educational video as the teaching media was effective to help students in mastering vocabulary.

Key words: educational video, teaching vocabulary

Abstrak: Tujuan dari penelitian ini adalah untuk mencari tahu apakah penggunaan dari video edukasi efektif dalam mengajarkan kosakata kepada murid kelas VIII SMPN 4 Tanjung Raya 1 di tahun akademis 2011/2012. Metodologi penelitian ini adalah pre eksperimental dengan menggunakan video edukasi. Sample dari penelitian ini adalah siswa kelas VIII SMPN 4 Tanjung Raya yang berjumlah 20 orang. Pengumpulan data menggunakan pre test dan post test. Penulis memberikan dua treatment yang berbeda di waktu yang berbeda. Berdasarkan data nilai dari post test lebih tinggi di bandingkan nilai pretest. Rata-rata nilai pretest 39,5, jadi hasil dari nilai pretest di klasifikasikan "rendah". Di lain pihak setelah diberikan treatment, nilai rata-rata post test dari murid adalah 72,25. Hasil ini diklasifikasikan "bagus mendekati sempurna". Perbedaan dari pretest dan post test adalah 32.75. terlihat perbedaan antara nilai pretest dan post test setelah treatment. Dengan demikian, penelitian ini membuktikan penggunaan video edukasi sebagai media mengajar adalah efektif membantu murid dalam menguasai kosa kata.

Kata kunci : video animasi, mengajarkan kosakata

Vocabulary is one of the language components that have to be taught to the students in order to get better comprehension of the language, especially in English. In communication, students need vocabulary which can support them to produces and use meaningful sentences because vocabulary provide organ of sentence. That's why vocabulary is very important to be mastered. Jeremy Harmer (1991, 153) classifies that "Then it is vocabulary that provides the vital organs and flesh". For that reason the

students have to develop their vocabulary and master it in order to be able to communicate with other.

Without having acceptable vocabulary bank, we will have difficulty in learning English. Because of that, students will get bored soon, some students get difficulty to improve their vocabularies in English since they view it as new language and some of them only able to learn it at school.

Vocabulary is the basic element of a language. People need to master the vocabulary in order to speak and understand what they have already read or listened to. As the basic parts of language, vocabulary expands together with language development that enables people to communicate with others nowadays. It means that language and vocabulary are always developed on the same time. Based on the observation and information from both of the writer and collaborator, the writer found that most of the students were weak at vocabulary learning. They found it was difficult to understand the meaning of any strange and new words in the English subject which became their weakness, thus, learning activities tend to remain silent during most of the subject, indeed, it affected their scores in this subject.

Seeing the condition, educational video was used by the writer as the teaching media to improve students' ability in vocabulary mastery. Media is important to help the teacher in teaching process, to make the students understand, comprehend the material and indeed the teaching learning process in english subject will be easier to be done. Because of this reason the writer wanted to improve students' vocabulary through the educational video.

Video as a media can enhance the students' vocabulary. Lynne Cameron said that "Vocabulary is best learned when the meaning of words is illustrated, for example by a picture, an action or real object".

Video can be integrated into learning activities Smaldino (2005:284). Videos are available on almost any topic and for all types of learners in all the domain of instruction including cognitive, affective, motor skill, and interpersonal. Video can manipulate both time and space. It can take the learner almost anywhere and extend students' interest beyond the walls of the class room.

Many early psychological studies of learning from film and particularly TV found this medium to be inferior to text. Studies included comparisons between reading newspaper reports and watching TV news. In these early studies the memory retention was always stronger for those who read the reports. This was shown to be linked mainly to the ability of the individual to control the speed of the delivery of information. When you read you can pause at any time, which was not possible with classroom based TV and Film. This has changed with the advent of online video which can be paused and rewind easily. More recent studies now see no difference in memory retention between the two media, video and text.

Research also examines the idea that cognitive overload may occur because the viewer has to process audio and visuals at the same time. Careful design of the film can elevate this. For instance signaling clearly where the focus of the audio is in terms of the video image will help the viewer merge the two. However, too much information, or information that is superfluous, can reduce learning.

The writer was interested in educational video because based on her experience, as PPL teacher at SMPN 4 most students only had few English vocabularies, some of them were poor in vocabulary because of their lack of supporting materials for learning English which were not really support them to improve their vocabularies such as, they found it hard to learn and obtain new vocabularies since they only learned it from their Student's Practice Activity (LKS) book which were not actually adequate to support teaching learning process, and most students less understood the importance of English dictionary for learning process in order to help them find the definition of vocabularies that made them rarely use or bring the dictionary. From these problems which have been occurred, the writer wants to give solution to help students of SMPN 4 to improve their vocabularies through educational video.

METHOD

It is important to know the definition of teaching and learning process since it will become advantages to build necessary strategy for it.

Educational expert from various perspectives have given different definitions on teaching. A definition has been generated which is conventionally understood by traditional teacher. Learning is considered transfer information from teacher to the students in the classroom. From this definition, it is simplicity stated that there is only one – direction process which places the teacher as a tank of information and the students are the other point, as the glass of water to information. On the other hand, the simple definition denies the involvement of other aspect. Teaching is not only about transfer knowledge but also to help students respond their environment in effective way.

Another expert defined teaching as any activity of person to show or to help other how to do something in order to know or to understand the given instruction and to guide the knowledge (Brown,2007:46). Teaching is just like a process of communication which involves parties, one as a sender and other is the receiver. The teacher sends the students message of knowledge and skill, and then the student receive and give feedback. As the result the process, students build their competence and performance.

Research is a systematic approach to obtain answer to the questions. Considering the problems of the research, this research is a pre-experimental study in which the researcher gave a lot of consideration for this matter in order to find the possible solutions for the problem by conducting experiment.

Based on the problem of this research, the most appropriate method was one group pretest-posttest design where in this method there was no control group but this method gave a systematic information of the subjects' achievement before and after the treatment. In this design the writer decided to investigate the effectiveness of using educational video through listening to teach vocabulary. Arikunto (2006:85) states that "pre-experimental study is a research procedure that has no control group which the most commonly used in pre-experimental study is pre-test and post-test". Pre-test is administered before treatments began to know previous acquisition of the sample that is followed by conducting treatment and enclosed by post-test.

In this research, the appropriate method used is pre experimental research. In the thesis, the writer decided to investigate the effectiveness of using educational video to teach vocabulary. Arikunto (2006:85) states that “pre-experimental study is a research procedure that has no control group which the most commonly used in pre-experimental study is pre-test and post-test”. Pre-test is administered before treatments began to know previous acquisition of the sample that is followed by conducting treatment and enclosed by post-test. In conducting this research, the writer gave a pretest to the students. The function of the pretest (O1) was to find the basic acquisition of students on understanding the describing picture technique. Then the writer gave two times of treatments (X) to help the students understood about the vocabulary and also to introduce a new technique that can used to help students found it more easier in learning vocabulary. And the last, the writer gave a posttest (O2) to find out the effect of the treatment on improving vocabulary by using educational video.

Video stimulates and engages students creating interest and maintaining that interest for longer periods of time, and it provides an innovative and effective means for educators to address and deliver the required curriculum content.

In this research the researcher takes some educational videos as the learning sources, they are “Midas Touch” and “The Greatest Treasure”. These animation videos show the students not only with their interesting story to follow, but also with quite easy message to be delivered in order to be comprehended, and of course with some good moral values contained within each educational video, they will have a visual imaginary of the topic that will be discussed. Then the other beneficial of using audio-visual media is to verify the learning process, know the cultures, manner of speak and mindset of the language that they learn about relationship by using video in order to improve students vocabulary, by using educational video students will find simple way to learn vocabulary, educational video helps students to acquire at least a glimpse of message from the video, even though they find it difficult to catch up with difficult and strange words they encounter in the video.

Technique and Tools Data Collecting

1. Technique of data collecting

In this research, the researcher employed the measurement technique to measure the students’ vocabulary achievement using by educational video in teaching vocabulary. The measurement technique administered twice. First, the pre-test data was to be collected before the treatment. The second one was post-test, that was to collect the data after the treatment was given to the students.

2. Tools of Data Collecting

The tool used to collect the data was a measurement technique in the form of written test. The test was used to measure the students’ ability in vocabulary through listening comprehension by using educational video. The teacher gave video and some questions that related with the topic, regular and irregular verbs. The students must answered the questions

and then filled in the blanks with the correct word. The tool of collecting data that was in this research as follows:

- Pre-test and post- test
In this research the form of pre test and post test were written tests. And the content consisted of two educational videos as the media to learn vocabulary.

Technique of Data analysis

To analyze of the students' individual score, the researcher uses the formula follow:

- The students' individual score of pre-test and post-test
To analyze of the students' individual score, the researcher uses the formula follow:

$$S = \frac{R}{K} \times 100$$

Where : S = The students' individual score

R = The right answer

K = The total number of items

Table 1 Table of Classification

The follow criteria to be used in the students' individual score:

Test score	Classification
80-100	Excellent
60-79	Very good
50-59	Adequate
40-49	Inadequate
0-39	Very poor

- The students mean score of pre-test and post-test
The students' mean score of pre-test and post-test was calculated by using these formulas:

$$\bar{X}_1 = \frac{\sum x_1}{N} \quad \bar{X}_2 = \frac{\sum x_2}{N}$$

Where: \bar{X}_1 = The mean score pretest of students' action

\bar{X}_2 = The mean score posttest of students' action

$\sum x$ = The sum of score of students' action

N = The number of the students being observed

- The students' interval of score of pretest and posttest
After calculating the students' means score of pretest and posttest, the researcher calculated the interval score of pretest and posttest by using the formula:

$$\bar{D} = \bar{X}_2 - \bar{X}_1$$

Where: \bar{D} = The interval of score of pretest and posttest

\bar{X}_2 = The students' mean score of posttest

\bar{X}_1 = The students' mean score of pretest

- d. The analysis on the students' significance of the students' score pretest and posttest. The significance of score of pre-test and post-test was calculated by using t-test formula:

$$t = \frac{\bar{D}}{\sqrt{\frac{\sum D^2 - \frac{(\sum D)^2}{N}}{N(N-1)}}$$

Where:

t = Analysis on the students' significance score

\bar{D} = The interval of pre-test and post-test

$\sum D$ = The sum of students' interval score of pre-test and post-test

$\sum D^2$ = The sum of the students' squared interval score of pre-test and post-test

N = Number of students.

RESULT AND DISCUSSION

Result

1. The result of students' individual score in first cycle.

The students' mean score of pre-test and post-test was calculated by using these formulas:

$$\begin{aligned}\bar{X}_1 &= \frac{\sum X_1}{N} \\ &= \frac{790}{20} \\ &= 39,5\end{aligned}$$

(Based on Harris' criteria, it is qualified as "Poor")

The students mean score of post-test

$$\begin{aligned}\bar{X}_2 &= \frac{\sum X_2}{N} \\ &= \frac{1.445}{20} \\ &= 72,25\end{aligned}$$

(Based on Harris' criteria, it is qualified as "Average to good")

After finding the mean score of both pre-test and post-test, the researcher calculated the students' interval score of pre-test and post-test that show in followed

$$\begin{aligned}\bar{D} &= \bar{X}_2 - \bar{X}_1 \\ &= 72,25 - 39,5 \\ &= 32,75\end{aligned}$$

Table 2
Qualification The students' interval score of post-test and pre-test

Test	Mean score	Qualification
Post-test	72,25	Average to good
Pre-test	39,5	Poor
Interval score	32,75	

This kind of score was crucial to calculate the significance of the students' interval score of pre-test and post-test

The analysis significance of the students' difference

The significance of interval score of pretest and posttest was calculated by applying t-test formula as follows:

$$\begin{aligned}
 & \frac{\bar{D}}{\sqrt{\frac{\sum D^2 - \frac{(\sum D)^2}{N}}{N(N-1)}}} \\
 &= \frac{32,75}{\sqrt{\frac{23.825 - \frac{(655)^2}{20}}{20(20-1)}}} \\
 &= \frac{32,75}{\sqrt{\frac{23.825 - \frac{429.025}{20}}{20(19)}}} \\
 &= \frac{32,75}{\sqrt{\frac{23.825 - 21.451}{380}}} \\
 &= \frac{32,75}{\sqrt{\frac{2.374}{380}}} \\
 &= \frac{32,75}{\sqrt{6,24}} \\
 &= \frac{32,75}{2,49} \\
 &= 13,15
 \end{aligned}$$

This kind of score was crucial to calculate the significance of treatment of teaching vocabulary using the educational video.

Hypothesis Testing

The result of degree of freedom from student's pre-test and post-test showed that t-test is higher than t-table ($13.15 > 2.093$). Therefore, the Null hypothesis (H_0) is rejected and alternative hypothesis (H_a) is accepted. It means that the used of educational video in teaching vocabulary to the eighth grade students of SMPN 4 Tanjung Raya is effective. This technique is able to increase the students' achievement.

Discussion

From the data analysis, the researcher found that the use of educational video in teaching vocabulary especially to the eighth grade students of SMPN 4 Tanjung Raya was improve their achievement. The researcher can see that the students enjoy the teaching process with educational video as media that made them learned enthusiastically.

When teaching learning process, at the start of the lesson, researcher plays the video that related to the lesson, and asks the

some question to the students. It can be seen; almost all of the students answer the researcher questions. And all of the students follow her when the researcher asks to the students to follow her spelling. They are very enthusiasts, and want to more know about what will be discuss. And off course, it was made the researcher easy to guide the students to learn the lesson.

The researcher has conducted a treatment to 20 students as the sample of research. In order, to make the treatment run systematically and smoothly, the researcher has prepared some lesson plan as the framework. The researcher has planned and used three lesson plans for treatment with the allocated time twice at forty minutes (2x40 minutes) each meeting as state in the basic frame of the curriculum that a period is forty minutes for the junior high school student.

In the treatment, the researcher using educational video as media of teaching English integrated to enrich the students' vocabulary. The researcher expected that by using educational video in treatment, the students can master vocabulary more easily.

Teacher attracts students' attention by showing a video related to the topic. Teacher asks the students to watch the video and pay attention to the conversation. Then, teacher asks the students to listen to the conversation and to complete the uncompleted sentence. Teacher constructs the students to understand how to do exercises, and controls the class discipline by involving them in finishing the exercises. Finally, teacher given reinforcement to the students and closes the lesson.

Although researcher was found difficult for the teacher to find the appropriate educational video before teaching and the class was noisy too, the teaching atmosphere and the target learning were very conductive. As the result, students enjoy the learning process that made them learning enthusiastically and their achievement is good that made the teacher satisfied too.

The result of data analysis of pretest and posttest known that the score of posttest is high than the score of pretest. The students' total score of pretest is 790 with mean score 39,5. Based on the Harris' criteria, the score of pretest is classified as "Poor". On the other hand, after giving the treatment, the students' total score of posttest is 1.445 with mean score 72,25. It is classified as "Good to Excellent". Moreover, the students' interval score of pretest and posttest is 32,25. It shows that there is different score of pretest and posttest after treatment.

In order, to prove whether or not the different score was significant, the researcher needed to compare the result of t-test with t-critical value. In this research, the t-critical value with the level of significance 0.05 and the degree of freedom (df) = $N - 1$ (20-1) is 2.093. Since the result of t-test (13,15) is bigger than t-critical value, it meant that the students' score of pretest and posttest differ significantly. In summary, the alternative hypothesis that said "The use of educational video in teaching vocabulary to the eighth grade students of SMPN 4 Tanjung Raya was accepted as effective.

In conclusion, this research proved that the use of educational video as the teaching media can improve the ability in mastering the vocabulary.

CONCLUSION AND SUGGESTION

1. Conclusion

This research investigated the mastery of vocabulary of the eighth grade students of SMPN 4 Tanjung Raya 1 in academic year 2011/2012. The finding of this research includes: (a) The use of educational video in teaching vocabulary to the eighth grade students of SMPN 4 Tanjung Raya 1 is effective, that it can improve their score of test. (b) The improvement is 13,15 it means the use of educational video can significantly improve the eighth grade students' achievement. (c) The treatment with educational video can also improve the eighth grade students' motivation that make them active and involved in the learning process.

2. Suggestion

From the research finding which the educational videos were good media in teaching the vocabulary, as the writer suggested: (a) The English teachers of the junior high school are recommended to use the appropriate educational video as media that they can attract and motivate the students in learning vocabulary. Provide interesting educational video can motivated the students in learning English. (b) To illustrate the teaching materials with appropriate educational video, in order to facilitate the students to understand a passage or the meaning of words phrases or structures. (c) The teacher should give the students opportunities to share their problem in learning vocabulary and let them discuss the problem with other students or help them finding the way out, so they will find learning vocabulary activities be more interesting. (d) In teaching and learning process, the teacher as a facilitator should encourage the students' active participation.

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